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Two Subcylindrical Camariine Species of the Tribe Cnodalonini (Coleoptera, Tenebrionidae) from Thailand

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Abstract: Two species belonging to the subcylindrical species group of camariine genera of the tribe Cnodalonini are first representatives from Thailand. One is a new species of the genus *Pigeostrongylium*, and the other is *Camarimena multilineata* PIC 1925. The former is described under the name of *P. thailandicum* sp. nov., and the latter is redescribed.

Key-words: *Camarimena*, *Pigeostrongylium*, Camariini, Tenebrionidae, taxonomy, Thailand.

Introduction

Most of the Oriental Camariine species have been described by the European authors during the last 150 years. GEBIEN (1917) revised the species of the tribe Camariini of the world. KULZER (1954) made a key to the genera of the Oriental Region. KASZAB (1984) dealt with the subcylindrical group of the Oriental camariine species and reclassified them into 10 genera.

Lately, many coleopterists made researches in northern Thailand, and collected massive specimen materials. Some of them were offered to the present authors for taxonomic study. We found two camariine species of the subcylindrical group from this area in the collection of one of the us (K. M.). After their careful examination, we concluded that one, belonging to the genus *Pigeostrongylium* KASZAB 1984, is new to science, and that the other is *Camarimena multilineata* PIC 1925, originally described from Saigon. Both genera are new to Thailand. The genus *Pigeostrongylium* consists of two named species, both distributed in the Malay Peninsula. In the meantime, the genus *Camarimena* consists 26 described species, 11 from India and Sri Lanka, 9 from Java, Sumatra and Borneo areas, 1 from Sumbawa, 3 from Indochina including Myanmar, and 2 from the Philippines. Considering the distribution, the occurrence of a member of the genus in Thailand might be expected.

The authors herein describe the new species and redescribe *Camarimena multilineata* PIC.

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Camarimena multilineata PIC 1925 (Figs. 1-4)

Camarimena multilineata PIC 1925 - Mél.-exot. ent. 43: 11.

Male. Body elongate and robust, subparallel-sided or slightly divergent posteriad, weakly convex, lustrous; dorsal and ventral surfaces partly covered with fine isodiametric microsculpture. Blackish brown; dorsal surface purple; head more or less darkened, with apical portion of clypeus green; apical and basal margins of pronotum metallic green; scutellum greenish blue; elytra with striae brassy or greenish brassy, intervals with fuscated violet vitta along middle of each; antennae infusate; mouth parts dark reddish brown; venter dark metallic, pro- and mesosterna dark metallic green, metasternum dark purple, with transverse sulci metallic blue; 3 basal abdominal sternites metallic blue or dark purple, more or less brassy or purplish laterally, sometimes with basal areas metallic blue, 2 apical sternites black or blackish violet, metallic blue laterally; profemora dark blue, meso- and metafemora bluish violet, light purple basally; tibiae tricolored, purple basally, metallic blue medially and violet apically; tarsi black.

Head quadrate, densely and coarsely punctate, the punctures puberulous; clypeus flat, produced forwards and distinctly emarginate at apex, with apical angles acute; fronto-clypeal suture arcuate, clearly engraved posteriorly; genae as wide as long and longer than an eye, weakly tumescent at sides, with outer margins subparallel-sided in basal half and evenly tapering apicad; frons rather coarsely punctate, the punctures larger than those on clypeus, weakly depressed and sloping forwards, obliquely and longitudinally elevated along inner ocular sulci, space between eyes 3 times the width of the transverse diameter of an eye; vertex coarsely punctate, the punctures larger than those on frons. Eyes rather small, weakly convex; inner ocular sulci deep and bold, attaining front margins of eyes. Antennae short, reaching behind the middle of pronotum; 1st to 6th segments slender; 7th gently dilated towards apex; 8th to 10th each distinctly and roundly dilated towards apex; 11th oblong, with an obtuse angle at inner apical corner; 5 distal segments forming a club; ratios of the length and the width of each segment from basal to apical: in the length - 14.0, 6.5, 17.5, 13.0, 11.4, 11.3, 10.5, 12.0, 9.8, 10.0, 19.5 and in the width - 8.7, 7.0, 7.9, 8.0, 7.7, 8.3, 10.2, 14.0, 16.7, 17.0, 17.7. Terminal segment of maxillary palpus strongly triangular. Space between buccal fissure and eye (in ventral view) distinctly sulcate. Mentum trapezoidal, convex anteriorly, with a few long hairs at each side behind the middle. Submentum vertical, transversely quadrate, minutely punctate. Gula widely triangular, with very fine isodiametric microsculpture; gular suture distinctly impressed.

Pronotum subcylindrical, gently convex in middle, rather distinctly inclined posteriad, 1.11 times wider than long and widest at base, feebly rounded and convergent towards apex, densely, irregularly and coarsely punctate, the punctures becoming slightly denser and minuter along lateral margins; apical margin straight, obscurely bordered; lateral margins very fine, invisible from above; basal angles rectangular; basal margin nearly straight, thickly bordered. Scutellum triangular, minutely punctate.

Elytra elongate, 1.9 times as long as wide, sides weakly divergent posteriad, widest at apical 5/16; base slightly wider than that of pronotum, width at humeri 1.43 times as wide as base of pronotum; disc gently convex, punctato-striate, the striae moderately impressed, becoming slightly deepened apically, the punctures dense and distinct, minute in 1st and 2nd striae, becoming gradually minuter apicad; intervals weakly convex, sparsely and microscopically punctate, 9th interval invisible from above; humeral callus moderately swollen laterad; scutellar striae long, starting near base; elytral epipleuron narrow, weakly convex.

Prosternum very short in front of coxae and strongly depressed between coxae, bordered at apex, coarsely punctate; prosternal process roundly spatulate, coarsely and densely punctate. Mesosternal V-shaped ridge rather weak, declivous forwards, arcuate in lateral view. Metasternum minutely punctate, the punctures becoming minuter apicad and larger laterad. Abdominal sternites distinctly convex, more or less depressed in middle, densely punctate, with borders at sides; anal sternite slightly sinuous at sides; intercoxal process of 1st sternite narrowly tongue-shaped.

Legs rather short; femora funiculate and not short, densely punctate, profemora remarkably swollen about in apical half; tibiae short, ancipital on each outer margin, each inner margin pubescent in apical half; tarsi long, each claw-segment with 4 long bristles, protarsus with claw-segment 1.3 times as long as 4 basal segments together, ratio of the length of each metatarsal segment: 10.5, 10.0, 7.6, 28.0.

Body length: 13.2 - 14.0 mm; width: 4.4 - 6.7 mm.

Specimens examined: 1 ♂, Doi Pa Muang, Lampang Prov., N. Thailand, 19-V-1985, M. Sawai leg.; 2 ♂♂, Wieng Ko Sai National Park, Phrae Prov., N. Thailand, 18-V-1985, M. Sawai leg.

Distribution. Vietnam, Thailand.

***Pigeostrongylium thailandicum* sp. nov. (Figs. 5-10)**

Male. Elongate and slender, subcylindrical, weakly convex, and feebly shining. Coppery, diluted with purplish reflection; head and pronotum more or less matt, antennae infusate, mouth parts, abdomen, coxae and legs dark reddish brown.

Head quadrate; ratio of the width of following each widest point: measured at neck, at eyes, at genal base, at apical margin of jointed point between clypeus and genae, at apex, at frons = 25.0, 31.7, 28.4, 20.0, 20.0, 14.0; clypeus produced forwards,

slightly convex, and inclined forwards in apical 3rd, subtruncate at apex, minutely and feebly punctate; fronto-clypeal suture fine, barely discernible; genae coarsely punctate, distinctly tumescent at sides, with lateral margins roundly and strongly convergent apicad; frons narrower than clypeus, feebly depressed and gently sloping forwards, coarsely, not densely punctate, the punctures becoming larger posteriad and distinct on vertex, diatone 1.67 times the width of the transverse diameter of an eye. Eyes reniform, gently convex above and roundly produced laterad; inner ocular sulci distinct and deep, extending in front of eyes. Antennae just reaching base of elytra; 6 distal segments thickened and each distinctly dilated to apex; 11th oblong, 1.48 times longer than wide; ratios of the length and the width of each antennal segment from basal to apical: in the length - 12.0, 7.0, 13.0, 10.0, 9.3, 12.0, 14.0, 17.0, 15.0, 18.0, 26.5, and in the width - 8.3, 6.7, 6.7, 6.8, 7.3, 10.2, 12.5, 15.4, 15.0, 15.7, 16.5. Terminal segment of maxillary palpus strongly triangular. Mentum transverse, rounded at sides, depressed and sparsely pubescent. Submentum pentagonal, more than 2/3rds as large as mentum, densely pubescent. Gula tongue-shaped, transversely rugose; gular suture clearly impressed.

Pronotum barrel-shaped, 1.02 times wider than long and widest at basal 3rd, thence to base strongly convergent and to apex gently so; disc moderately convex, densely, coarsely and evenly punctate, the punctures slightly larger than those on frons, not depressed along base; apical margin slightly arcuate forwards; basal margin straight, bordered, the border thickened in the median half. Scutellum small, nearly smooth, with some scattered punctures.

Elytra elongate, 2.3 times longer than wide and 3 times longer than the pronotal length, widest at apical 3rd; ratio of the width of following several points as follows: measured at apical 3rd of elytra, at humeri, at pronotal base and at widest points of head = 62.0, 59.0, 41.2, 35.6; slightly dehiscent at apices and pointed at each apex; postscutellar areas of 1st and 2nd intervals roundly depressed; disc punctato-striate, though the striae are not entire, but interrupted in basal portion of 1st and 2nd striae, and major portions (except for about apical 1/3) of the remaining striae, the striae punctures uneven in size, small in 1st, larger in 2nd, foveolate and remarkably large in the rest, becoming much smaller in apical 3rd; intervals convex, sparsely and minutely punctate, those in lateral portions strongly sinuous and more or less incised by striae punctures, sparsely haired along striae near base and apex; scutellar striae long, each with 8 large punctures; humeral callus swollen laterad; elytral epipleuron transversely rugulose.

Venter densely pubescent. Prosternum very short in front of coxae; prosternal process sigmoidal in lateral view, strongly and arcuately descendant posteriorly behind coxae. Male genitalia as shown in figs 6-7.

Legs robust; femora strongly clavate with profemora extremely swollen in apical 3/5, meso- and metafemora so in the middle; tibiae slender, inner margin of protibia armed with an obtuse and weak tooth slightly behind the middle (at basal 27/60), with margin between apex and the tooth densely pubescent; mesotibiae gently incurved; tarsi long and slender, ratio of the length of each metatarsal segment: 23.0, 17.5, 8.3, 37.4.

Body length: 10.5 mm; width: 3.3 mm.

Holotype: ♂, Ban Nang Bang near Sai Yok, N. P. Kanchanaburi Prov. W. Thailand, 12-V-1985, H. Akiyama leg. (National Science Museum (Nat. Hist.), Tokyo). Unique.

Distribution. Thailand.

Notes : The new species is very similar to *P. pendleburyi* KASZAB 1984 from Malaysia, but is distinctly separable from the latter by the following points:

1. frons narrower than clypeus and not densely punctate; 2. terminal segments of antennae distinctly longer than wide; 3. elytral disc uni-undulate; 4. elytra 3 times as long as pronotum (2.5 times in *P. pendleburyi*); 5. protibia armed with a tooth not sharp but obtuse, which is located at slightly behind the middle on inner margin.

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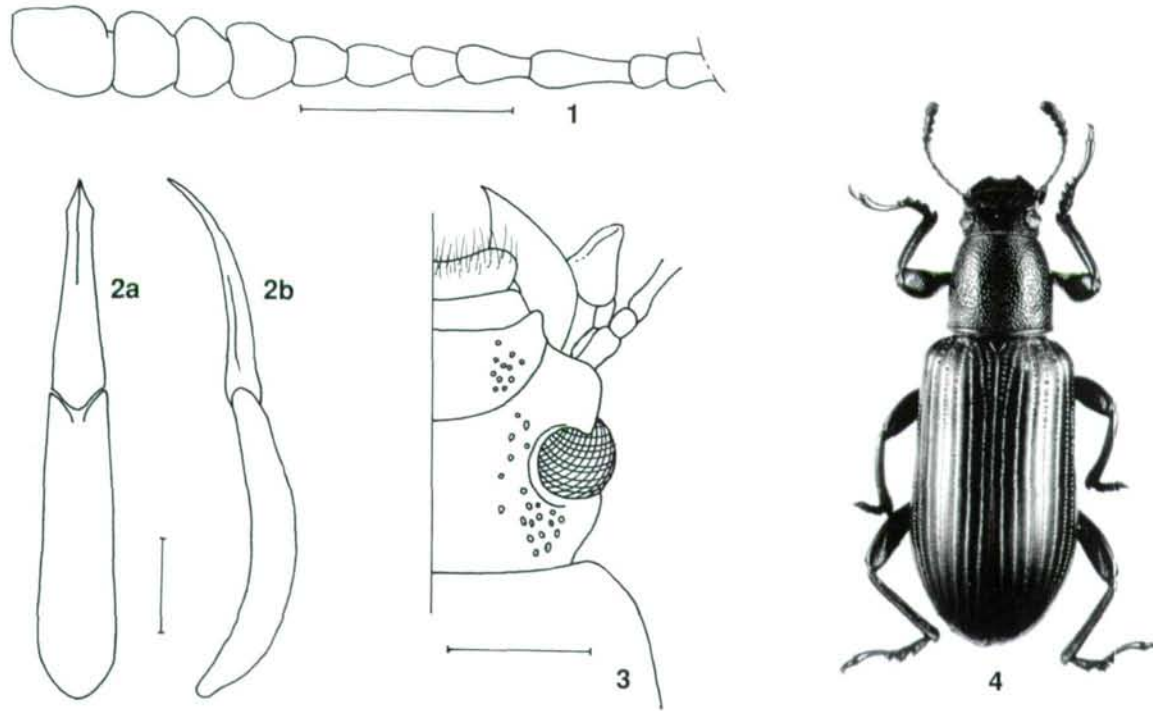
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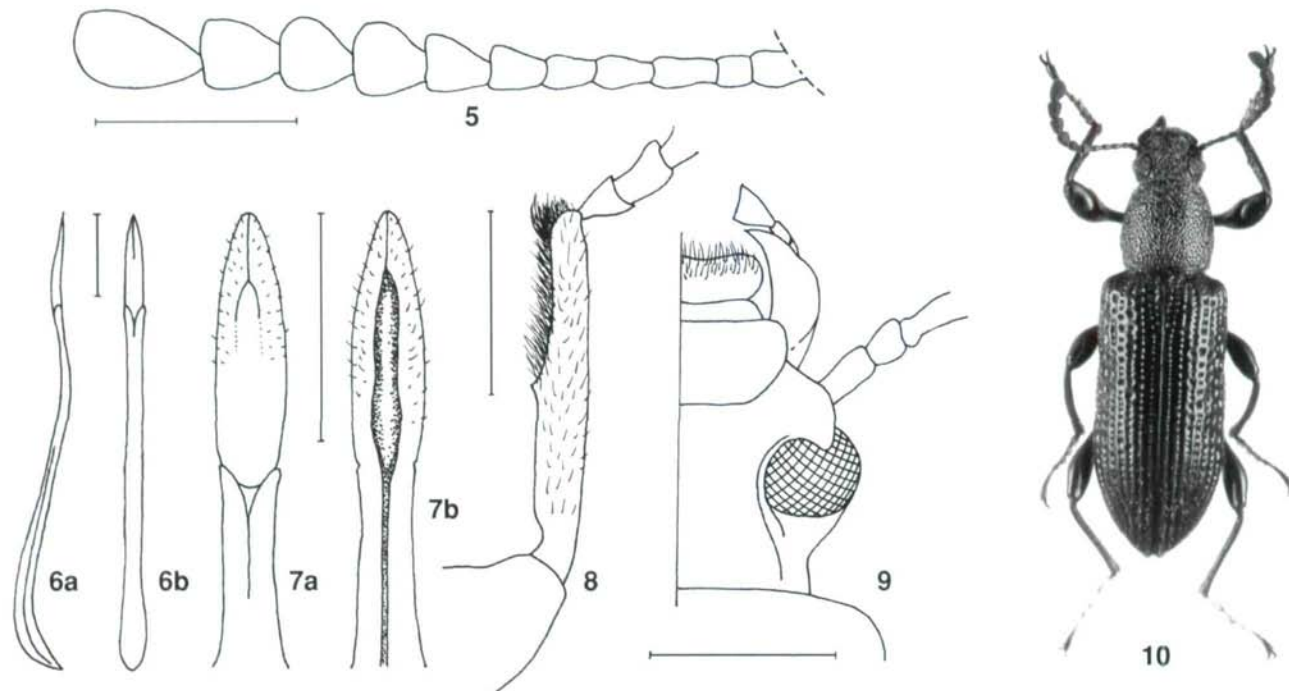
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Figs. 1-4: *Camarimena multilineata* PIC 1 - left antenna; 2a - male genitalia, dorsal view; 2b - do., lateral view; 3 - right half of head, dorsal view; 4 - habitus, holotype, ♂. (Scale: 1 mm.)



Figs. 5-10: *Pigeostrongylum thailandicum* sp. nov. 5 - left antenna; 6a - male genitalia, lateral view; 6b - do., dorsal view; 7a - parameres, dorsal view; 7b - do., ventral view; 8 - right protibia, dorsal view; 9 - right half of head, dorsal view; 10 - habitus, holotype. ♂. (Scale: 1 mm).